Letterhead

ODP 1578-76

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Mr. Robert H. Levine, Deputy Director
Defense Communications Engineering Center, DCA
1860 Wiehle Avenue
Reston, Virginia 22090

Dear Bob:

STATINTL

It was enjoyable talking with you on 30 July. I always
appreciate an update on what is going on at DCA. In my
present business, I have virtually no contact with anyone
from DCA, although I do get an occasional bit of news through
█████████

As I explained to you on the phone, we are undertaking
the development of a large stand-alone file building, storage
and retrieval system. While the design concepts are not firm
at the present time, it is clear that we will be pushing the
state-of-the-art in several areas: rapid text search; docu-
ment retrieval; and, telecommunications. The cost tradeoffs
involving telecommunications alternatives might well be the
governing factor in selecting a final design. It is in this
area that I thought we might get some useful ideas from your
people.

The system will be designed to accommodate up to 2000
remote interactive terminals which will be connected to the
computer environment through a telecommunications network.
The terminals could be limited to telecommunications at a rate
of about 9600 bits/sec., or the design could call for the
ability to remotely view documents at the terminal, which
would require wide-band digital telecommunications or possibly
video links. The computing environment could consist of a
very large central processor/mass storage system, or we could
choose a distributed system. If we go the distributed route,
the telecommunications network will involve considerable
switching. The majority of the terminals will be located
in our headquarters building.

We have a tight schedule which will necessitate pinning
down most of the basic design choices within the next year.
At the present time, we are trying to learn more about what
is going on in the telecommunications area which may be ap-
plicable to our problem. It occurred to me that people in
the Defense Communications Engineering Center would probably
have a good overview of activities in this area, both in govern-
ment and industry. If this is the case, we might be able to
save some time if we could talk to your people.

The topics we are interested in are:

a. Wideband transmission/multiplexing/switching systems for servicing a highly concentrated user environment.

b. Distributed processing systems.

c. Packet switching.

d. Error handling in communication networks.

STATINTL

If you want to discuss possible agenda topics further, you can call me on ███████████████████████████████████ is the project director responsible for the system development mentioned above.

If you feel that you are able to give us some advice in these areas, I would like to arrange a meeting sometime in late September 1976. Our group would consist of 6 to 8 people who are skilled in the design and development of large-scale information processing systems.

Please let me know whether you think this meeting would be fruitful and, if so, what date would be convenient for you.

Sincerely,

STATINTL

Clifford D. May, Jr.
Director of Data Processing

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